SUMMER SESSION OF COLUMBIA UNIVERSITY

THE attention of readers of the JOURNAL is called to the following extracts from the "Announcement of the Summer School of Columbia University" for the present year. Among the many courses offered for the general student, those on domestic science, physical education, and chemistry include subjects of special interest and attraction to nurses, from which we quote some which seem to us the most useful. The course "Chemistry sF" in especial (chemistry of food and nutrition) will be largely devoted to subjects which bear directly on problems which all nurses meet: for example, the nutritive value of typical "prepared" foods; the composition of cow's milk and its modification to any desired percentages, with laboratory analysis of the products, and similar questions.

These courses will undoubtedly be of great interest and profit to nurses who can arrange to attend them this July and August. A full catalogue can be obtained by application to the university.

COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK—GENERAL STATEMENT

The fifth Summer Session of Columbia University will open on Wednesday, July 6, 1904, and continue until Wednesday, August 17, inclusive.

Each course will consist of a minimum of thirty lectures or other exercises, or their equivalent in laboratory or field work.

REQUIRED FEES.

1—*Matriculation fee* $5
This fee must be paid at the opening of the Summer Session.

2—*Tuition fee* (for one, two, or three courses)..... $25
Students at the Summer Session are limited to three courses.

COST.

It is believed that the total expense involved in attendance upon the Summer Session, including tuition fee, but excluding railroad fare, may readily be kept below eighty dollars. In no event need it exceed one hundred dollars.

BOARD AND LODGING.

Whittier Hall, a university residence located at 1230 Amsterdam Avenue, between One-Hundred-and-Twentieth and One-Hundred-and-Twenty-first Streets, will be open for the accommodation of the students of the Summer Session.

A special rate of fifty dollars is made for the students of the Summer Session, from dinner on Tuesday, July 5, to breakfast on Thursday, August 18, inclusive. This rate is payable in advance and includes room, board, and laundry (one dozen plain pieces per week).

DEPARTMENT OF DOMESTIC SCIENCE.

S12*a*—Food production and manufacture. Lectures, reading, and excursions. Professor VULTE.

1.30, Room 401, Teachers College.

This course covers the following special topics: cereals, preparation of meals, flours, and patented products; composition and use of leavening agents; bread, biscuit, and pastry; treatment of vegetables and fruits; jellies and preserves; oils and fatty bodies; water for drinking and detergent use, including mineral waters and non-alcoholic beverages.

This course will be continued in the Summer Session of 1905.

S14*a*—Food principles. Lectures, reading, and laboratory work. Professor VULTE.

2.30–4.20, Room 401, Teachers College.

This is a course of instruction designed to present a study of the more important food principles, including sugars, starches, proteids, fats, mineral salts, special attention being given to the changes taking place during domestic manipulation and digestion; examination of water for domestic purposes.

Students are recommended to take the lectures in Chemistry S*F* as supplementary to this course.

Students who have had the equivalent of this course will be given the opportunity to pursue advanced studies in the chemistry of foods and stimulants in the laboratory.

Laboratory fee, five dollars.

This course will be continued in the Summer Session of 1905.

DEPARTMENT OF PHYSICAL EDUCATION.

S3—Personal hygiene and first aid to the injured. Lectures and practical work. Dr. MACCASTLINE.

11.30, gymnasium.

This course considers personal health as a problem in vital economics, the human body as an organic machine, and the aim of personal hygiene to be the provision of the most efficient body mechanism for the life-needs of the individual. The topics include the argument for the careful study of health and hygiene; ideals of health influencing different peoples; structure and functions of the human body; changes in the organism due to evolution and civilization and the health prob-

lems arising from these changes; conditions necessary to the perfect state of the body and the activity of the various functions; causes of weakness, injury, degeneration, and disease; improvement of health and prevention of disease by hygienic means; methods of first aid to the injured.

s13—Anthropometry, diagnosis, and corrective exercises. Four lectures and two hours of practical work a week. Professor MEYLAN. 8.30, gymnasium.

This course deals with the practical methods of studying the human organism; of determining its conditions and needs, and of applying the various measures indicated for normal development, improvement of health and strength, correction of deformities, prevention and cure of certain forms of disease. The course includes the following: Recording of personal and family history; measuring and testing the body; observation of organic conditions and physical signs; tabulation of statistics; use of graphic methods for representing bodily conditions and changes; individual prescription of exercise and hygienic regimen; corrective exercise for common deformities, such as round shoulders and spinal curvature; adaptation of movements for functional disorders and special nervous conditions. There will be practical work for all students.

DEPARTMENT OF CHEMISTRY.

sF—Chemistry of food and nutrition. Five hours lectures a week with collateral reading, with or without laboratory work. Dr. SHERMAN. 1.30, Room 511, Havemeyer.

This course prerequires a knowledge of elementary chemistry and includes: The composition of food materials; food analysis and the detection of adulterations; chemistry of the metabolic processes, functions of proteids, fats, and carbohydrates in nutrition; methods and results of digestion and metabolism experiments, including the analysis of physiological products; discussion of the nutritive value of staple and "prepared" foods; modification of cow's milk for infant feeding; metabolism of energy, methods and results of calorimeter experiments; calorific values and mutual replacing powers of the principal nutrients; food requirements under different conditions.

The laboratory work to be taken with this course can be varied, depending on the time and needs of the student, from none to a maximum of thirty hours a week. It may include. The quantitative analysis of food, water, oil, etc.; determinations of the heat of combustion by the bomb calorimeter; experiments in artificial digestion; modification of milk, including the analysis after modification, to compare the actual with the calculated percentages; analysis of physiological products, urine, etc. Any of the analyses included in Course 13 (see announcement of the School of Chemistry) may be made.